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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,525	07/20/2000	Bruce E. Novich	1596C4	2888

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EXAMINER	
GRAY, JILL M	

ART UNIT	PAPER NUMBER
1774	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/620,525	NOVICH ET AL.	
	Examiner	Art Unit	
	Jill M. Gray	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5-63* is/are pending in the application.

4a) Of the above claim(s) *9-12,15-17 and 33-63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-8,13,14 and 18-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 5-7, 13-14, 18-21, 23-27, and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Afzali-Ardakani et al, 5,527,838 (hereinafter Afzali-Ardakani), for reasons of record.

Afzali-Ardakani teaches a fabric comprising at least one strand comprising a plurality of fibers having a resin compatible coating composition on at least a portion of a surface of the fabric, wherein the at least one fiber strand comprises at least one glass fiber, said resin compatible coating comprising a plurality of discrete particles, at least one lubricious material different from the plurality of discrete particles (fluorine-containing polymer) and at least one film forming material, essentially as claimed in present claims 1 and 5. See claims 1, 10, and 12 of Afzali-Ardakani. In addition, Afzali-Ardakani teaches that his plurality of glass fibers can be E-glass fibers as required by claims 6-7 and that his discrete particles can be lamellar particles such as boron nitride, per claims 13-14. See column 11, lines 1-3 and column 13, lines 35-47. Regarding claim 18, since the prior art teaches a composition that is substantially the same as that contemplated by applicants, said composition being coated on a similar fibrous substrate, the examiner has reason to believe that the plurality of particles of the prior art provide an interstitial space between at least one fiber and at least one adjacent fiber of the prior art fabric. As to clams 19-21, Afzali-Ardakani teaches that a plurality of discrete particles having a particle size of about 5 microns can be added in amounts

ranging from between about 25 and 65 volume percent, which necessarily embraces applicants' claimed range. See column 11, lines 29-35, Example 7, and claim 54. As to claims 23-24, Example 4 of Afzali-Ardakani teaches amounts of the lubricious within the present claimed range. Furthermore, Afzali-Ardakani teaches that his composition contains a film forming material of the type set forth by applicants in claims 25-27, such as epoxy. See column 9, lines 15-17. As to the coating being a powdered coating composition, applicants' claims are drawn to a final product. Presumably the coating on the end product would have some degree of powdery residue.

Accordingly, the prior art teachings of Afzali-Ardakani anticipate the invention as claimed in present claims 1, 5-7, 13-14, 18-21, 23-27, and 29-30.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, 13-14, and 18-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotera et al, 4,340,519 (Kotera) in view of Puppin 6,346,160 B1, for reasons of record.

Kotera is as applied previously and teaches a composition of the type contemplated by applicants that can be coated onto substrates such as glass and used in the formation of windows, but does not specifically teach coating his composition on a fabric comprising at least one strand comprising a plurality of fibers, wherein the at least

one fiber strand comprises at least one glass fiber. Puppin teaches a thermoplastic resin and fiberglass composite comprising a continuous glass fiber fabric and compatible resin such as polyester. See abstract, column 4, lines 49-52, column 5, lines 25-26, columns 8 and 9. In addition, Puppin teaches that his composite is used in the formation of components such as windows. See column 3, lines 32-45, column 4, lines 4-8, column 11, and lines 50-56. The formation of windows using glass, and more specifically, glass fabric, is known in this art as evidenced by the teachings of Puppin. Though Kotera may be silent as to a glass "fabric" in his teaching of coating his composition on glass and its suitability for windows, it would have been obvious to one of ordinary skill in this art, at the time the invention was made, to use a fabric comprising at least one strand that comprises at least one glass fiber, motivated by the teachings of Puppin and the reasonable expectation of obtaining a window having a good coefficient of thermal expansion, high tensile strength and high modulus.

Therefore, the combined teachings of Kotera and Puppin would have rendered obvious the invention as claimed in present claims 1, 5, 13-14, and 18-32.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 5-8, 13-14 and 18-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5-8, 13-14, 18-32, 44, 46-47, and 50 of copending Application No. 09/620,526. Although the conflicting claims are not identical, they are not patentably distinct from each other because coated strands of each application are substantially the same and it would have been an obvious variant to the skilled artisan to form the coated fiber strand of the copending application into a fabric as presently claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

6. Applicant's arguments filed October 17, 2005 have been fully considered but they are not persuasive.

Applicants argue that Afzali-Ardakani fails to expressly or inherently teach a fabric comprising at least one strand comprising a plurality of fibers and having a resin compatible powdered coating on at least a portion of a surface of the fabric, the resin compatible powdered coating comprising, *inter alia*, a plurality of discrete particles, at least one lubricious material different from the plurality of discrete particles and at least one film-forming material, wherein the at least one fiber strand comprises at least one glass fiber.

The examiner disagrees for the reasons stated above in paragraph 1.

Applicants argue that Afzali-Ardakani states that his fluorine-containing thermoplastic polymer is defined as a "modifier" which dissolves in a disclosed resin and there is no mention of the use of such a polymer as a lubricant.

It is the position of the examiner that the fact that the prior art does not specifically state the usage of his fluoropolymer as a lubricant, does not preclude the fluoropolymer from having lubricious properties. In addition, while the claims set forth that the coating composition contains a lubricious material, the claims do not specify that this component or the composition per se, is drawn to, or present in the final, end coated fabric.

Applicants argue that nothing in Afzali-Ardakani supports the Examiner's conclusion that the resin material disclosed in the reference is a coating composition, further arguing that the resin cited by the Examiner is used to impregnate various types of materials and, therefore, is not a "coating composition on at least a portion of a surface of the fabric" and thus, the prior art does not teach or suggest that the resin is utilized as a coating.

The examiner disagrees. In particular, impregnation necessarily results in a portion of the impregnant being on the surface of the impregnated substrate, or more specifically, being coated on at least a portion of the surface. Accordingly, it is the examiner's position that the teachings of Afzali-Ardakani do in fact result in a portion of a surface of the fabric being coated.

Applicants argue that Kotera and Puppin are directed to the use of different chemicals in different methods for different purposes to obtain different products.

Applicants further argue that one of ordinary skill in the art would not have been motivated to combine their divergent teachings as proposed by the examiner and thus, the Examiner has failed to demonstrate a prima facie case of obviousness.

In this concern, agreeably Kotera teaches the preparation of an aqueous dispersion of polyester resin and Puppin teaches composite materials comprising a resin and glass fabric. However, the teachings of Kotera are not so limited, (i.e., the formation of a polyester dispersion) and embrace the formation of composite articles comprising a thermoplastic resin and glass. This teaching would have provided a suggestion to the skilled artisan that the dispersion of Kotera could be used in the formation of glass composite articles, and the teachings of Puppin would have provided a suggestion to one of ordinary skill in the art at the time the invention was made that glass fabrics could be used as the glass in said composite articles. Though Kotera may teach that the resin gives an external coating layer, the teaching that said resin is applied as a dispersion would have provided a suggestion to the skilled artisan that depending upon the substrate, said resin may be incorporated therein. Furthermore, "resin that is incorporated into" a substrate necessarily results in resin that gives some degree of an external coating layer. It should be noted that the teachings of Puppin are relied upon for all that he would have reasonably imparted to one of ordinary skill in the art at the time the invention was made, namely, that the formation of windows using glass fabric was known in the art.

Therefore, the combined teachings of Kotera and Puppin would have provided a suggestion to the skilled artisan to use a fabric comprising at least one strand that

comprises at least one glass fiber to form window having a good coefficient of thermal expansion, high tensile strength and high modulus.

Applicants argue that Kotera and Puppin teach away from their combination.

The examiner disagrees. In particular, Kotera teaches that his composition can be applied to glass windows and Puppin teaches the formation of windows comprising glass fabric. It would have been obvious to the skilled artisan to apply the treatment of Kotera to a glass fabric window, as taught by Puppin, to result in a window having a good coefficient of thermal expansion, high tensile strength and high modulus.

Applicants argue that the examiner has presented no evidence that the teachings of Kotera and Puppin would have provided one of ordinary skill in the art with a reasonable expectation of success in making the present invention.

In response thereto, Kotera teaches that his polyester resin dispersion when used to treat surfaces such as glass and windows results in good coefficient of thermal expansion, high tensile strength and high modulus. However, Kotera does not specifically teach how his windows are formed. Puppin teaches that windows formed from glass fabrics are known in the art. The skilled artisan would reasonably presume that if the composition of Kotera results in enhanced properties when applied to glass and windows, then, said composition would result in enhanced properties when applied to a glass (fabric) window. Applicants have provided no factual evidence on this record to the contrary.

No claims are allowed.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jill M. Gray
Primary Examiner
Art Unit 1774

jmg